MT 0
S4-5

AA000049192 8
UC SOUTHERN REGIONAL LIBRARY FACILITY

VOCATIONAL GUIDANCE IN MUSIC

by

CARL E. SEASHORE

Digitized by the Internet Archive
in 2007 with funding from
Microsoft Corporation

http://www.archive.org/details/vocationalguidan00seasiala

FIRST SERIES No. 2 SEPTEMBER, 1916

UNIVERSITY OF IOWA MONOGRAPHS

VOCATIONAL GUIDANCE IN MUSIC

Published by the University, Iowa City, Iowa

Issued monthly throughout the year. Entered at the Postoffice in Iowa City, Iowa, as Second Class Mail Matter

371.42
S&I

IN THE SERIES ON AIMS AND PROGRESS OF RESEARCH

VOCATIONAL GUIDANCE IN MUSIC

CARL E. SEASHORE
Professor and Head of the Department of Philosophy and Psychology, and Dean of the Graduate College

COPIES MAY BE OBTAINED ON REQUEST
FROM THE LIBRARIAN OF THE UNIVERSITY

36495

PREFACE

The appearance of this bulletin marks the inauguration of a system of vocational guidance in music based upon laboratory measurements in the psychology of music. The newly-coined term, *Psychology of Music Studio*, is intended to convey the two-fold idea of the scientific method of modern psychology, which is a laboratory science, and the artistic spirit of the musician in his studio. Hereafter no serious efforts in vocational guidance in music can afford to separate these two, the method of the science and the spirit of the art. The art spirit has prevailed among musicians in all times, but the introduction of the scientific attitude and of the scientific technique for the "discovery of the individual" has been contingent, not only upon the development of experimental psychology, a science of very recent origin, but also upon the development of the technique of applied experimental psychology in this field of music; for applied psychology is quite as distinct from pure psychology as engineering is from physics, and the pure science must come before the applied.

To those who have watched with interest the development of this field in Iowa, the present bulletin is intended as a greeting and a report of progress. But the specific purpose of this announcement is to place the facilities of the *Psychology of Music Studio* at the service of the public with a cordial invitation to utilize its facilities for the discovery, guidance, and fostering of musical talent.

C. E. S.

Iowa City, Iowa,
September 5, 1916.

MT10
S43

VOCATIONAL GUIDANCE IN MUSIC

Talent for music is a "gift" bestowed by nature upon different persons very unequally. We recognize this by speaking of some persons as musical and others as not musical in various degrees.

This talent can be measured. With the wonderful development of modern psychology, it is now possible to make reliable and fairly complete measurements of the fundamental capacities which constitute musical talent early enough to serve as a guide in the selection and planning of a musical career.

Musical talent is not one thing or capacity. It represents scores or, if we count in finer detail, hundreds of fairly distinguishable capacities, any one of which may be absent or highly developed, quite independently of the other. There are, therefore, many kinds and proportions of musical talent, and it is worth while for the person who is to invest a life of talent to have information about the specific nature of his talent and its possibilities.

Thus, it comes about that the measurement of musical talent is not one measurement but a large number of measurements which must be built up into a system so as to represent fairly the most salient features of musical talent. It is necessary, for example, to know the sensitiveness of the ear to tones, the musical imagination, the musical memory, the musical intellect, the musical feeling, the time-sense, the sense of rhythm, and the sense of harmony and melody, which are capacities involved in the hearing and appreciation of music. Likewise, it is necessary to know the corresponding facts about the ability to express music in singing and playing. Different instruments require different kinds of talent.

THE PSYCHOLOGY OF MUSIC STUDIO

This studio is a branch of the Psychological Laboratory and is in charge of a psychologist and a musician who have as their assistants trained workers who can make these measurements by

the best approved psychological methods, and is equipped with instruments designed especially for this work. It is the business of those in charge to interpret the measurements in such a way as to give concrete and accurate knowledge of the actual natural capacity of the person examined for a musical education or musical achievement and to show on specific grounds whether or not a musical education is worth while, why musical education should be of one kind rather than of another, what musical powers are most promising for cultivation, what powers need specific training, or what pitfalls should be avoided, etc. In brief, the examiner should be able to state on the basis of scientifically observed facts, what kind of musical training and achievement, if any, the pupil is adapted for and what is the probable extent of achievement and rate of progress.

THE MUSICAL TALENT CHART

These measurements may be shown in a single picture, the musical talent chart. Figures 1 to 5 are such talent charts selected from a series of more than three hundred which were worked out for University students during the past school year. As soon as one is familiar with the meaning of the terms and the simple method of scaling, these charts give at once a correct and concrete picture of the equipment that an individual has in the form of musical talent. The chart is no more complicated than a chart of physical development in height, weight, lung capacity, strength, etc. In private measurement for vocational guidance, many other measurements are made than those here indicated; yet the charts here shown are fairly comprehensive.

The capacities measured are named at the left hand of the chart. Each measurement is indicated by a jog in the talent curve on the scale of one hundred. Thus, a bar in the 100 per cent line means that this person stands among the best 1 per cent among normal persons of his class. These standards or norms have been worked out by measurement of large numbers of cases and separate norms are used for adults and children of various ages. This method of "percental" rank makes it possible for any one to interpret even the most complicated measurements in simple terms.

Figure 1 is a record of a young man, a sophomore in the University, who has always wanted to study music but has been discouraged by his father, while his two sisters who do not care for music, or achieve any marked success, have always been encouraged by the father. Tracing the talent curve from the top downward, we see that this man ranks 90 per cent in tonal hearing, 96 per cent in tonal imagery, 99 per cent in tonal memory, 94 per cent in consonance, and 100 per cent in motor ability. These are all very high marks and represent unusually good talent for the appreciation of the tonality and harmony aspects of music. The record on motor ability indicates an extraordinary deftness of the hand which would make playing for him easy and very delicately controlled. But the curve drops on the points of time-sense, free rhythm, regulated rhythm, and rhythmic judgment, showing that he is not well adapted for music in which the time element is dominant. Although his acuity of hearing is below average, this does not interfere with his music because his sensitiveness to differences in the loudness of sound is very keen, 99 per cent, which mean that he has an exceptionally fine appreciation for musical expression. He sings in true pitch with great skill, although practically untrained, and has fine control of voice, although his lack of training shows in his ordinary record for the singing of intervals. He has a very wide register in the pitch of the voice and the quality of his voice is good and promising for development with training. He has had but little training, but gives evidence of a high order of musical appreciation and fine, sensitive, and sympathetic expression.

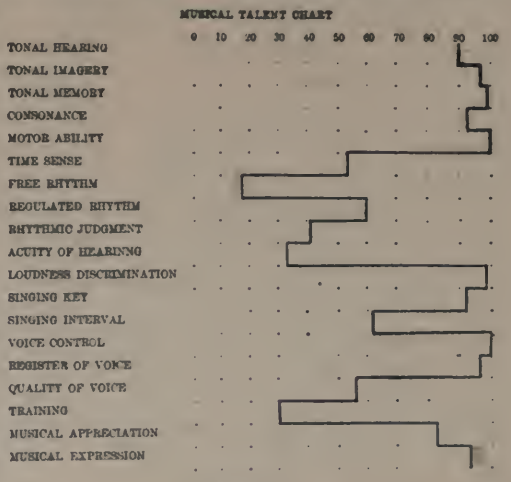

FIG. 1

This is, in a crude way, what this figure shows to the expert

at a single glance. In the more extensive examination of those who intend to make a profession of music, other measurements besides those shown in these figures are made, depending upon the kind of music the person is interested in and his natural *fortes* and faults.

The quantitative measurements are supplemented by general information and systematically observed facts in regard to life-history, ambition, opportunities, achievements, etc. The entire situation is judged by a well-trained and successful music teacher who has the scientific and artistic grasp of the problem and can render *a disinterested decision on well-founded and accurate information.*

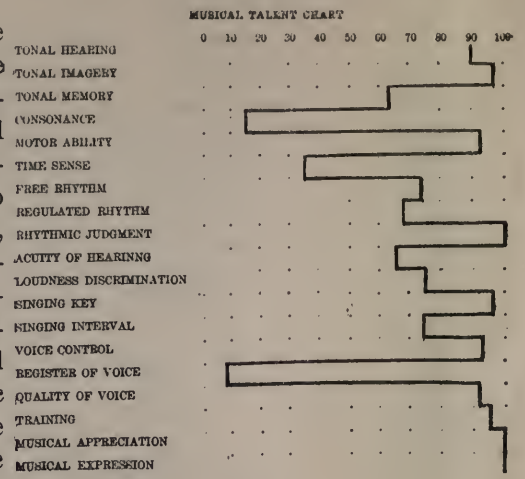

FIG. 2

In the same way, the reader can now interpret to some extent the other four figures, which are inserted merely to show how strikingly these talent charts depict individual differences. Figure 2 is the record of a violinist who has marked musical ability. Figure 3 is the record of a young woman of high musical ability who has some trouble with time and rhythm as well as difficulty in

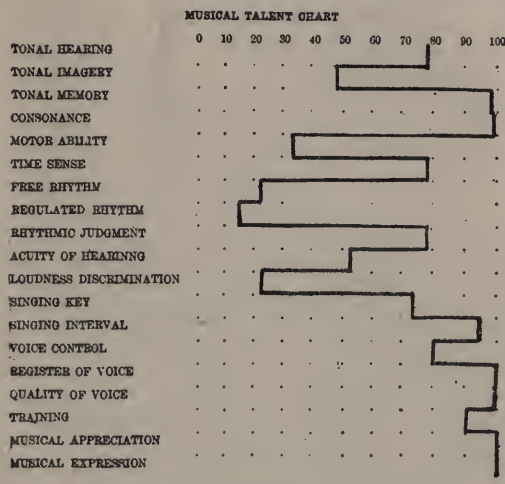

FIG. 3

forming of mental pictures of tones, but has a beautiful voice which she is developing. Figure 4 is the chart of a young lady who is markedly deficient in musical capacity throughoutand has not profited by her extensive musical education. This may be contrasted with Figure 5 which shows a case of unusually high natural talent for music, though relatively uncultivated.

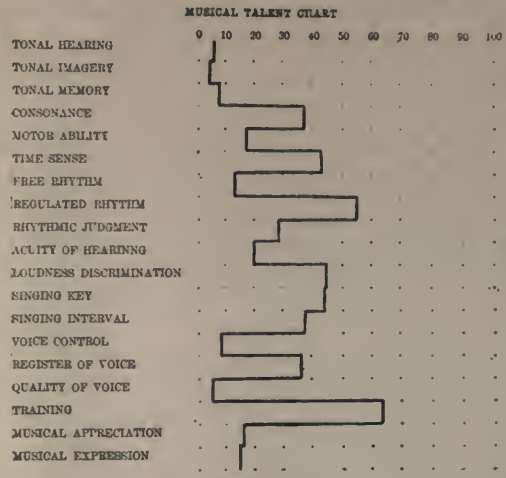

FIG. 4

PROFESSIONAL EXAMINATION

This laboratory-studio is maintained at the University for the service of the people of the state. Persons who are planning to devote themselves seriously to music, will find it worth while to come to the studio to be examined. A talent chart, like the above, will be worked out and the closest personal attention will be given to each individual examined for the purpose of pointing out the extent and nature of the various traits of musical talent and their bearing upon the choice of vocation or avocation, the planning of and training for the same, and a forecast of the probability of marked success.

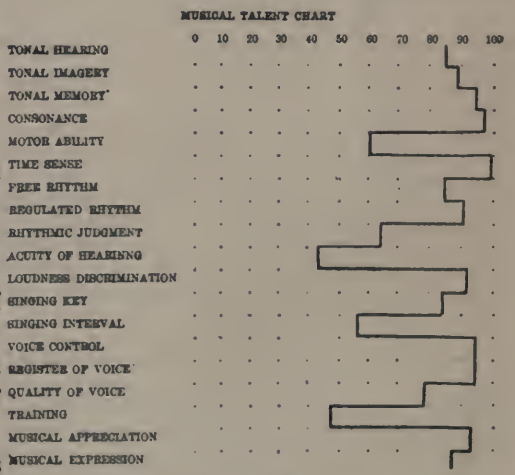

FIG. 5

The thoroughness of this examination

will vary in extent with the importance of the situation and the seriousness with which it is regarded by the person to be examined. It will take about three days of continuous work with one person to make twenty measurements. Those who wish to be examined should come prepared to stay that length of time.

The most desirable time to make the examination of children is about the age of ten or twelve, although many of these tests can be made to advantage on younger children. By the age of ten, children have had opportunity to show their interest in music and it is still early enough to plan preparation for a musical career.

The studio will be of special service to more mature pupils who have encountered difficulty in their musical training. Teachers are therefore invited to send pupils for examination in order that they may learn the specific nature of the cause of their difficulties. All records of professional examinations are, of course, kept in privacy at the discretion of the person examined or his sponsor.

Although this service is free to the people of the state, it is necessary to charge a small registration fee in order to protect the studio from imposition by persons who are not going to make serious use of the measurement. At the present time, this fee is three dollars and will entitle one to a three-day examination. If this were not the service of a public institution, the charge for such service would be at least ten times that amount. All appointments for examinations should be made at least two weeks in advance.

MUSIC SURVEYS IN THE PUBLIC SCHOOLS

The staff of the Psychology of Music Studio is prepared to make a limited number of surveys for vocational guidance in music among children of the public schools. For the coming year the plan is to take the children in the eighth grade in each of a few cities of this state.

Some of the fundamental tests are so adapted that they can be made on about one hundred children at a time. Five or six such tests will require about eight half-hour periods in all from the children. The results of these will serve as a sort of dragnet through which marked talent or lack of talent will be revealed.

The tests are so organized as to be of great value as exercises in the course of music. Indeed, some of them are being introduced in the course, as: time-judging, precision, tone-imaging, etc. Therefore, if the time may be credited to music, not a moment of the pupils' time will be wasted. The tests serve the purpose of arousing interest in music and have an important mission in calling the attention of individuals and the community to the significance of musical talent. It is predicted that tests like these will in the near future be used by progressive music supervisors as part of the regular instruction and guidance in music in the schools.

Although this series of class tests is necessarily somewhat crude and incomplete, it serves the purpose of a preliminary sifting. The very good and the very poor will be identified with considerable certainty and all will be ranked roughly in the order of their natural ability. The results will be discussed with teachers and parents and due caution will be exercised in preventing hasty conclusions.

Such a service may bring out great surprises in the discovery of unsuspected and latent talent. The finding of a few before unknown but really promising children may be of great value for the art of music and for the making of a successful career for these children. It may lead to further examination and provision for proper musical education.

These surveys are in the nature of a demonstration and practical application of this new method of vocational guidance. They will be undertaken only where the hearty co-operation of the supervisor of music and the other school officers can be obtained. The plan of the survey provides for a definite system of follow-up work through supervisors of music, teachers, and parents.

Here, again, the service is rendered free to the state, but the school board or some organization such as that of a women's club will be expected to pay the traveling expenses and maintenance during the time that the examiners are in the city. The present plan is to spend from one to two weeks in each place where the experiment will be undertaken. During this time, a special class will be maintained in the evening for persons who are especially interested but who are not in the grades that are being examined.

THE ECONOMIC VALUE OF SUCH VOCATIONAL GUIDANCE

"The editor of one of our leading music journals, with much patience and persistence, and at considerable expense and effort, has gathered statistic, for whose accuracy he vouches, which would indicate that the American people spend each year for musical education the sum of $220,000,000, not including the $7,500,000, which, until the war, was annually spent abroad by American students. . . We are every year spending approximately *four times as much* for musical education as for all the public high schools of the country, *nearly three times as much* as for all our Colleges, Universities, and professional schools, and *twenty-four times as much* as for our Normal Schools; or, in other words, we are spending nearly $40,000,000 a year more for musical education in this professedly non-musical country than for all High School, Normal, Professional, College and University teaching. Of course, I realize that Mr. Freund's figures might shrink somewhat if subjected to the same pitiless scrutiny as the Government reports, but even if they should shrink one-half, they would still overlap by nearly $25,000,000 the largest item in the bill for higher education in this land." (*From the annual address of the President of the National Music Teachers' Association, December, 1915.*)

This statement, with whatever reservation it may be taken, shows that vocational guidance in music presents a remarkable economic issue. It is safe to say that a very large portion of the enormous sum of money spent on musical instruction is worse than wasted, because spent on persons who have no adequate musical talent; and the most recent investigations tend to show that not one-half of the persons, in a given community, who have a high order of musical talent are discovered and given a fair chance of a musical education.

This economic problem looms up large today, as it has never done before, because we are in the midst of a campaign to universalize musical education. This campaign, be it based on educational theory, social fad or fancy, or the mere performance of the newly-rich, forces music upon larger and larger numbers of those who are unfit, and at the same time makes us unconscious of the neglect of the gifted.

"Dollars talk." But this economic issue is of course very small in comparison with the problem of the conserving of human energies, the discovery of genuine talent, and the freeing of

the non-talented from the curse of maladjusted effort, as estimated in terms of the loss or gain to art, or the use or abuse of human energies.

PROCEDURE TENTATIVE

So far as we are aware, this movement is new and unique in its scope, its scientific basis, and its public service. For the last fifteen years, a body of research students have been at work in the Psychological Laboratory under the direction of the writer concentrating their efforts upon this one problem of developing the methods and means of measuring musical talent. We have no complete system; our attitude is that of the investigator in pure science, open-minded, always struggling to make improvements and frank in the confession of our limitations. Since this is not a money-making affair, we are free to proceed patiently in the effort to develop this fascinating phase of vocational guidance on a sound scientific basis. This accounts in part for the fact that we have been slow in publishing methods, norms, and interpretations as they have been gradually developed.[1]

The chief examiner at the present time is Mrs. Esther Allen Gaw, a professional music teacher who has enjoyed both general and musical education in this country and abroad and is now devoting her entire time to this field of applied psychology. Other members of the staff co-operate with her in various capacities. All communications relative to this work should be addressed to the writer who has general charge of the work.

[1] The first general outline of this work was given in the writer's presidential address before the American Psychological Association, entitled "The Measure of a Singer" (Science, Vol. XXXV, No. 893, February 9, 1912). The same general treatment is followed in the section "Mental Measurement" in the author's Psychology in Daily Life (Appleton's), and one specific illustration was given under the head "Measurement of Musical Talent" (Musical Quarterly, Vol. I, January, 1915, The Schirmer Publishing Co., New York). Technical reports on particular measurements have appeared in various journals, especially in the University of Iowa Studies in Psychology.

UNIVERSITY of CALIFORNIA

LOS ANGELES
LIBRARY

Lithomount
Pamphlet
Binder
Gaylord Bros. Inc.
Makers
Stockton, Calif.
PAT. JAN. 21, 1908

This book is DUE on the last date stamped below

MAY 16 1934
MAY 31 1957
DEC
FEB 1 1935
JAN 6 1936
JAN 19 1937
JUN 4 1937
SEP 26 1942
OCT 29 1943
FEB 1945
REC'D COL. LIB.
DEC 5 1946
JAN 15 1948
JAN 19 1953
JAN 26 1953
Form L-9-15m-7,'32

RECEIVED
MAIN LOAN DESK
A.M. 7|8|9|10|11|12|1|2|3|4|5|6 P.M.

RECEIVED
MAIN LOAN DESK
OCT 29 1964
NOV 2 1964
A.M. 7|8|9|10|11|12|1|2|3|4|5|6 P.M.